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ABSTRACT

The report describes an Iowa project designed to identify reasonable accommodations for learning disabled students in regular secondary classrooms and to develop strategies for implementing classroom modifications. Project activities consisted of: a review of the literature on mainstreaming and classroom modifications; development of a descriptive list of modifications; organization of modifications into the three areas of classroom environment, evaluation, and instruction; a survey of 278 Iowa secondary education teachers to determine teacher perceptions of the reasonableness of the modifications and accommodations; and development of various staff development strategies for promoting and facilitating reasonable modifications. Survey results for the three areas are reported for the total teacher population, for teachers of English, mathematics, science and social studies and for others such as career and vocational education teachers. Project recommended reasonable accommodations are then listed for each subject area. Finally, six inservice staff development plans using the lists of accommodations and modifications are outlined based on the following models: general inservice, staff development at the building/department level, teacher utilization at the pre-referral/referral stage, teacher/consultant, teacher self development, and administrative/teacher utilization. Appended are the full survey form and a statement on the definition and characteristics of students with learning disabilities. (DB)

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PROJECT REPORT

AUGUST, 1986

General Education Modifications For Students With Learning Disabilities Grades 7-12

State of Iowa
Department of Education
Bureau of Special Education

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PROJECT REPORT

General Education Modifications For Students With Learning Disabilities Grades 7-12

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State of Iowa
Department of Education
Bureau of Special Education
August, 1986

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Introduction

With the passage of the Education of All Handicapped Children Act in 1975 (Public Law 94-142) and revisions to Chapter 281 of the Iowa Code in 1974, the concept of "least restrictive environment" in the education of handicapped students was officially adopted. The Federal regulations implementing P.L. 94-142 require:

> ... to the maximum extent appropriate, handicapped children ... are educated with children who are not handicapped... [34 C.F.R. Section 300.550(b)(1)]

while Iowa rules of special education state:

> Pupils requiring special education shall attend general education classes, participate in extracurricular activities and receive services in a general education setting to the extent appropriate. Handicapped pupils shall be maintained in general education classes with special education support services when appropriate (Education {670}-12.4(1), Iowa Administrative Code).

Clearly, an expected outcome of both the Federal and state regulations is the inclusion of handicapped students in the general education program for all or part of the school day. While the spirit of the mandates is being satisfied, controversy and disagreement abound about the role of general education teachers in the education of "mainstreamed" handicapped students, and more specifically. the extent to which the general education program should be adjusted or modified to meet the needs and abilities of handicapped students.

In an effort to provide some clarification to the issue, the Policy Research Center of the Council for Exceptional Children (PRC/CEC) prepared a position statement that stated in part:

> Whenever a handicapped child is placed in a regular classroom, the responsibility of the regular educator for that child is the same as for any other child in the classroom. Because all children differ with respect to amount of learning, rate of learning, and learning style, minor modifications in methodology. curriculum, or environment are often necessary for both nonhandicapped and handicapped children. Special education, which involves significant modifications in

> methodology, curriculum, or environment, may also be delivered to some handicapped children in regular classrooms. Whenever this arrangement is specified in the child's IEP, the development of such specially designed instruction is the responsibility of special educators. Regular educators are responsible for assisting the child in carrying out the program...(Barresi & Mack, 1979).

The PRC/CEC position indicates that general education teachers should modify the classroom program for mainstreamed handicapped students. Stephens, Blackhurst, and Magliocca (1982) have echoed this position: "Accommodation and adjustment of the learning environment is a primary responsibility of the teacher in working with the exceptional student (p.)." The question remains, however, as to what the modifications should be. The PRC/CEC position states that general education teachers are responsible for "minor" modifications or accommodations while special education teachers are responsible for "significant" modifications or accommodations. But what are"minor" modifications? And, when does a modification become a "significant" accommodation? Such questions have yet to be answered and the need to bridge the instructional endeavors of both general and special education teachers for "mainstreamed" handicapped students remains unfulfilled.

Hudson, Graham, and Warner (1979) researched the attitudes and needs of general education teachers in regard to mainstreaming exceptional students. The finding indicated that teachers hold unfavorable attitudes toward mainstreaming and that they believe they do not have the time, support, or training necessary for working with handicapped students in their classrooms effectively. In studying the issue of accommodation, Fagen, et al. (1985) concluded that even though there exists a considerable amount of information on how and what to do in terms of

modifications for handicapped students, general education teachers are not overly supportive of modifications and limited implementation has evolved because they view accommodation as unreasonable.

Considering the perceptions, attitudes, and needs of general education teachers relative to accommodating handicapped students in the general education classroom, the questions that need to be answered are:

* What accommodations or modifications do general education teachers view as reasonable in terms of time, change from usual teaching practice, and need for assistance in implementation and ongoing use?

* What type of staff development is required to insure implementation of reasonable accommodations in general education classrooms and how should this training be delivered?

* What type of support do classroom teachers need in implementing and maintaining the use of reasonable accommodations?

These questions were the focus of the special project - General Education Modifications for Learning Disabled Students, Grades 7-12.

Project Description

The goals of the project were to:

(1) develop a method for identifying accommodations for learning disabled students that classroom teachers perceive as reasonable, and,

(2) identify and develop various strategies for promoting cooperation and team work in implementing classroom modifications, including various approaches to staff development that would promote and facilitate the use of accommodations for learning disabled students.

The project's primary objectives were to:

(1) identify as many general education program modifications and accommodations as possible that would be appropriate for secondary level learning disabled students;

(2) develop and field-test a questionnaire or survey that could be used to determine the reasonableness of the forementioned modifications and accommodations from a general education perspective;

(3) research general education teachers' perceptions of the reasonableness of the various accommodations and modifications; and

(4) identify various strategies for promoting and facilitating the use of accommodations in the general education program.

The activities of the projected consisted of:

(1) a review of the literature on mainstreaming and classroom modifications to identify various accommodations appropriate for learning disabled students;

(2) the development of a list of modifications with brief descriptions of each modifications;

(3) the organization of the various modifications into broad categories;

The modifications were finally organized into three major categories:

*Accommodations in Classroom Environment
*Accommodations in Instruction, Materials, and Aids
*Accommodations in Evaluation

(4) the selection of a rating scale of reasonableness for teachers to rate each modification;

The 3-point scale of reasonableness developed by Fagen, et al. (1985) was selected for the survey. The three points of the scale are:

* Low Reasonableness = accommodations that require much extra time, much change in usual teaching practices, and much additional help

* Moderate Reasonableness = accommodations that require some extra time, some change in usual teaching practices, and some additional help

* High Reasonableness = accommodations that require little extra time, little change in usual teaching practices, and little additional help

(5) the preparation and field-testing of a survey that would be used to identify teacher perceptions of reasonableness for each identified modification;

(6) the use of the final version of the survey with a broad spectrum of secondary level general education teachers to determine their perceptions of the modifications;

The complete, final version of the survey is presented in Appendix A.

(7) a report of the findings from activity #6, and,

> The results of the survey are presented on pages 17 through 64. The results are presented for the total group of teachers included in the survey and for individual subject areas: English, mathematics, science and social studies, and career education and other. The number of teachers and school districts included in the survey are presented in Table 1.

(8) the development of various staff development strategies for promoting and facilitating general education modifications.

> Several staff development alternatives are presented on pages 65 through 107. A comparative study of the alternatives was not conducted, nor was such a study within the scope of the project.

The project was intentionally designed to enlist general education and special education personnel to accomplish the project's goals and complete the project's activities. The project secured the participation and involvement of two local school district (LEA) teams. One team was from the Ida Grove Community School District and the other from the Sioux City Community School District. The Ida Grove team represented the middle school and high school, and included four general education teachers, a guidance counselor, and two special education teachers. The Sioux City team represented West High School and included four general education teachers, a guidance counselor, and two special education teachers. The project also involved nine area education agency staff members: six special education consultants, two school psychologists, and the project coordinator.

Table 1

DISTRIBUTION OF RESPONDENTS
BY DISTRICT AND CATEGORY

DISTRICT	CATEGORY					
	Total	English	Math	Sci./Soc. St.	Others[1]	Not Used[2]
Cherokee	34	6	3	7	18	0
Eastwood	31	6	2	8	11	4
Ida Grove	33	5	4	6	12	6
Kingsley-Pierson	7	1	1	1	2	2
Lawton-Bronson	23	3	2	6	12	0
Mason City	31	2	5	8	14	2
Sgt. Bluff-Luton	21	4	3	5	8	1
Sioux City (West)	39	4	6	10	18	1
Sioux City (East)	48	5	7	11	23	2
West Monona	29	3	1	6	19	0
Total	296	39	34	68	137	18

[1] Career/vocational education teachers and teachers not included in the other content areas.

[2] Surveys were not complete or respondents did not use scale provided.

During the project, several significant factors emerged which will be given consideration in working with the project in 1986-87. These include:

(1) Using the LEA teams to identify and select items for the survey proved to be unpractical. A more effective approach was to use a small group of selected individuals to develop the large pool of modifications. Once the large pool of items was identified and a suggested format developed, the input of the LEA teams was more directed and specific, and ultimately more beneficial. The discussion and decision-making of the LEA teams at that point appeared to be the most appropriate way to use the teams.

(2) Using the survey with a large number of teachers to determine reasonableness of accommodations was very appropriate. It must be noted, however, that respondents had difficulty in following the directions. In other words, rather than rating the items on amount of time, change in teaching practices, and additional help needed, there was a tendency for the respondents to rate the items in terms of whether they personally felt the modification should be done in their classrooms. Project personnel realized it would be extremely difficult to eliminate personal feelings from the survey and this point was stressed when giving the instructions. This emphasis, however, did not totally eliminate the tendency of respondents to rate modifications on the basis of personal opinion regarding use of modifications in their classrooms.

(3) Feedback, both written and verbal, from respondents indicated a wide variation of teacher opinion and how they perceived the LD student. A substantial number of participants indicated that they do not believe it is their responsibility to modify the curriculum in any way. This attitude was not spread equally across all districts, however. The survey may be one approach for getting honest reactions of teachers to specific modifications and accommodations in general. This type of information can be used to identify building staffs or particular departments within a building that hold negative attitudes toward modifications for learning disabled students.

(4) Project personnel initially prepared detailed written descriptions of each accommodation or modification. This approach, however, was deleted when the LEA teams began to provide input. The teams suggested that each item, meaning each modification, needed to be written in precise terms, understandable without additional clutter. This approach was adopted. As a result, items were combined, re-written or eliminated in order to meet this standard. Also, when given directions, the respondents were told if an item was not understandable to note this accordingly. A review of the completed surveys indicated very few items were marked as not understandable. No items were consistently identified as not understandable.

(5) Use of the survey for planning a staff development program has not been field-tested to any large degree. This is part of the

plan for 1986-87. It should be noted, however, that one of the staff development ideas has been used.

> Six general education teachers did use the survey to do a self-growth project. The teachers first evaluated what they were doing using the survey. Once this was done- items were selected that they planned to incorporate into their teaching style. Each teacher selected four or more modifications to be incorporated into the classroom program. Each of the teachers reported satisfaction with the process and noted that they were able to detect some student changes.

(6) Finally, the modifications presented in the survey are simple procedures that many teachers now use or have used to some degree. Very few modifications are included that require extensive training or additional time to implement. Rather, the modifications reflect good teaching practice. This point may be disappointing to individuals who consider using the survey. Many times educators view inservice as "getting the miracle or magic answer." This is not the intent of the survey. Rather, the survey is intended as a vehicle to help a school district in communicating good teaching practices. The primary reason for using this instrument should be to stimulate discussion. The challenge then becomes one of developing a communication exchange among teachers that will encourage and facilitate the use of reasonable accommodations and modifications so that learning disabled students, as well as other low achieving students, can be better served in general education classes.

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Survey Results

Results of Survey

In determining different levels of Reasonableness, percentages have been applied as follows:

1. H = High Reasonableness =accommodations that require little extra time, little change in usual teaching practices, and little additional help.

> Items marked H (High Reasonableness) indicates over 50% (up to 100%) of the teachers agreed that the accommodation fit the above stated criteria.

2. M = Moderate Reasonableness = accommodations that require some extra time, some change in usual teaching practices, and some additional help.

> Items marked with an M (Moderate Reasonableness) indicates that nearly 50% of the teachers agreed that the accommodation fit the above stated criteria.

3. L = Low Reasonableness =accommodations that require much extra time, much change in usual teaching practices, and much additional help.

> Items marked with an L (Low Reasonableness) indicates that 25% or less of the teachers agreed the accommodation could be considered moderate or high reasonableness.

Survey results were compiled for each of the following areas:

1. Total Teacher Population
2. Teachers of English
3. Teachers of Math
4. Teachers of Science and Social Studies
5. Teachers of Career Education & Others

Results:

Total Teacher Population

Reasonableness of Recommendations for
Mainstreamed Secondary Learning Disabled

Results of Survey Findings
Completed by Total Teacher Population

In reviewing the findings the following marking system has been applied:

H = High Reasonableness = accommodations that require little extra time, little change in usual teaching practices, and little additional help.

> Items marked H (High Reasonableness) indicates over 50% (up to 100%) of the teachers agreed that the accommodation fit the above stated criteria.

M = Moderate Reasonableness = accommodations that require some extra time, some change in usual teaching practices, and some additional help.

> Items marked with an M (Moderate Reasonableness) indicates that nearly 50% of the teachers agreed that the accommodations fit the above stated criteria.

L = Low Reasonableness = accommodations that require much extra time, much change in usual teaching practices, and much additional help.

> Items marked with an L (Low Reasonableness) indicates that 25% or less of the teachers agreed the accommodation could be considered moderate or high reasonableness.

I. ACCOMMODATIONS IN CLASSROOM ENVIRONMENT

H1 provide for preferential seating

H2 reduce visual distractions (unusual/unnecessary clutter, gawdiness)

H3 post assignments in same place

M4 reduce auditory distractions (unusual/unnecessary noise factors)

L5 assign learning partners (2 people)

L6 use listening center

L7 use peer tutors

L8 use volunteers (providing school has volunteers available)

L9 assign to cooperative learning groups (3 to 6 in group)

II. ACCOMMODATIONS IN INSTRUCTION, MATERIALS AND AIDES

H1 use diagrams and other visual aides

H2 provide clear copy (worksheets/handouts, etc.)

H3 explain the textbook format at beginning of course

H4 write key points on board or overhead

H5 compliment lecture of materials with added explanations

H6 provide vertically lined paper (graph paper) for correctly lining up math problems

H7 allow using a calculator and other appropriate aids

H8 use samples of finished product as model

H9 provide uncluttered worksheet format

H10 encourage use of a notebook with dividers for subject organization (student purchases)

H11 provide a list of materials needed

H12 teach abbreviations germane to the specific course

H13 clarify the criteria and format when giving written assignments

H14 ask students to skip lines in draft when doing written assignment

H15 utilize a consistent format for worksheets

H16 utilize a multisensory presentation (ex. written, oral, lab work)

H17 use "Hands On" activities

H18 teach in small, sequential steps

H19 have frequent review

H20 have structure (concrete, developmental procedures)

H21 use clues/hints

H22 summarize key points

H23 use concise directions (both written and oral)

H24 introduce new vocabulary

H25 state purpose for reading when giving reading assignment

H26 teach use of context clues

H27 verbalize steps necessary to complete assignment

H28 orally emphasize key words

H29 distinguish operations in math

H30 summarize and allow for questions

H31 give oral and written directions together

H32 emphasize where directions are located

H33 talk slower

H34 vary voice, tone, and pitch

H35 circulate and assist (teacher)

H36 teach cues and other listening skills

H37 establish daily routine

H38 explain change in routine

H39 work from factual to abstract questions (concrete to abstract)

H40 list steps necessary to complete assignment

H41 provide time-frame for long term assignments

H42 provide direction when student has several options

H43 work from easy to hard problems

H44 allow explanation time - provide teacher instruction before giving assignment

H45 use short answers

H46 stress accuracy

H47 provide work time during class

H48 provide specific feedback on completed work

H49 provide immediate feedback when possible

H50 allow notes with oral report

H51 allow visual aides with oral report

H52 provide option to read silently or orally

H53 adjust time limit on oral reports

H54 teach techniques to aid in generalization

H55 organize lectures following an outline form

H56 reduce copying activities

H57 teach outlining/provide a model

H58 teach the needed structure for reports (model)

H59 assist student with spelling requests

H60 provide feedback during lectures

H61 provide careful structuring to teach writing skills

M62 provide activity worksheets

M63 have student maintain notebook for misspelled words

M64 use tangible teaching aids

M65 use peer student to take notes and share and/or compare with notes of LD student

M66 provide examples on worksheets

M67 use audiovisual to introduce and/or summarize

M68 provide word bank for new or unfamiliar vocabulary

M69 modify map/chart work

M70 provide a list of all assignments given - syllables

M71 provide a study guide

M72 teach divided page note-taking

M73 discuss the individual's written response

M74 use small groups to discuss main ideas

M75 brainstorm words (both when introducing or practicing

M76 have student repeat directions

M77 give additional time for student to organize

M78 provide cues to comprehension of inferential thinking

M79 allow some written assignments to be done as a group project

M80 allow more time to complete (pacing)

M81 modify original task to meet needs of handicapped students

M82 proofread the student's draft

L83 select material relevant to student

L84 provide taped material to listen to, rather than read

L85 allow correction of notes by using a model

L86 provide highlighted texts for student use

L87 divide multi-syllable words

L88 visually illustrate new vocabulary

L89 use log or personal journal

L90 coordinate spelling needs with reading vocabulary

L91 give student a copy of teacher's notes

L92 give student a written outline of lecture

L93 use problem solving sequence chart

L94 use worksheet guide with film

L95 allow use of marker when reading

L96 supply page number that answer is on

L97 use a story starter approach (ex. give first paragraph and have student complete story)

L98 allow student to preview lecture notes

L99 use instructional games

L100 accept multi-model response (ex. if can't write, do orally)

L101 allow students to tape answers rather than write out

L102 allow student to tape oral reports rather than present to group

L103 substitute comparable projects in exchange for written assignments

L104 match pupil's reading ability to text used/or use companion text

L105 provide large print materials

L106 use reading pairs (2 students read assignment together)

L107 have discussions with the individual to insure comprehension

L108 adjust expectations - minimizing amount students must do to pass course

L109 teach SQ3R process (survey, questions, read, recite, review)

L110 use team teaching (when feasible)

III. ACCOMMODATIONS IN EVALUATION

H1 vary test format (written, oral, short answer, essay, multiple choice, true-false, matching, computation, yes-no, demonstration testing)

H2 provide feedback to parents re: progress via phone, letter, or parent conference

H3 provide feedback to learners re: progress via teacher/student conference or written report

H4 underline important words in directions or test items

H5 read the directions to the student

H6 vary grading system - homework, tests, class discussion, special projects

H7 provide clear test copy

H8 provide review time in or outside of the class (emphasizing key points to study)

H9 provide advance notice for test preparation (preferably at the start of the unit)

H10 allow to recheck work on calculator

H11 have grading system reflect varied activities (homework, tests, projects, presentation)

M12 emphasize higher utilization of objective test in contrast to subjective tests

M13 increase allowable time for completion

M14 block matching questions into smaller groups (ex. 5/5/5 rather than group of 15)

M15 review orally and individually to ensure comprehension of essay questions

M16 provide examples of test content and format

M17 chart grade progress for student use

L18 teacher records test on cassette tape

L19 allow student to tape answers on recorder (essay)

L20 take test orally (with teacher after school or with special teacher in resource room)

L21 assist by reading the test questions to the student

L22 take exam in classroom during regular time; take exam again orally in resource room; average two scores

L23 change fill-in-the-blank to multiple-choice format

L24 eliminate one of the choices in multiple choice (choose three answers instead of four)

L25 reduce weight of test importance

L26 allow self checking

Results:
Teachers of English

Reasonableness of Recommendations for
Mainstreamed Secondary Learning Disabled

Results of Survey Findings
Completed by Teachers of English

In reviewing the findings the following marking system has been applied:

H - High Reasonableness = accommodations that require little extra time, little change in usual teaching practices, and little additional help.

> Items marked H (High Reasonableness) indicates over 50% (up to 100%) of the teachers agreed that the accommodation fit the above stated criteria.

M = Moderate Reasonableness = accommodations that require some extra time, some change in usual teaching practices, and some additional help.

> Items marked with an M (Moderate Reasonableness) indicates that nearly 50% of the teachers agreed that the accommodations fit the above stated criteria.

L = Low Reasonableness = accommodations that require much extra time, much change in usual teaching practices, and much additional help.

> Items marked with an L (Low Reasonableness) indicates that 25% or less of the teachers agreed the accommodation could be considered moderate or high reasonableness.

I. ACCOMMODATIONS IN CLASSROOM ENVIRONMENT

H1 provide for preferential seating

H2 reduce visual distractions (unusual/unnecessary clutter, gawdiness)

H3 post assignments in same place

M4 reduce auditory distractions (unusual/unnecessary noise factors)

L5 assign learning partners (2 people)

L6 use listening center

L7 use peer tutors

L8 use volunteers (providing school has volunteers available)

L9 assign to cooperative learning groups (3 to 6 in group)

II. ACCOMMODATIONS IN INSTRUCTION, MATERIALS AND AIDES

H1 use diagrams and other visual aides

H2 provide clear copy (worksheets/handouts, etc.)

H3 explain the textbook format at beginning of course

H4 write key points on board or overhead

H5 complement lecture of materials with added explanations

H6 provide vertically lined paper (graph paper) for correctly lining up math problems

H7 allow using a calculaator and other appropriate aides

H8 use samples of finished product as model

H9 provide uncluttered worksheet format

H10 encourage use of a notebook with dividers for subject organization (student purchases)

H11 provide a list of materials needed

H12 teach abbreviations germane to the specific course

H13 clarify the criteria and format when giving written assignments

H14 ask students to skip lines in draft when doing written assignment

H15 have frequent review

H16 have structure (concrete, developmental procedures)

H17 summarize key points

H18 use concise directions (both written and oral)

H19 state purpose for reading when giving reading assignment

H20 teach use of context clues

H21 verbalize steps necessary to complete assignment

H22 orally emphasize key words

H23 summarize and allow for questions

H24 give oral and written directions together

H25 emphasize where directions are located

H26 talk slower

H27 vary voice, tone, and pitch

H28 circulate and assist (teacher)

H29 teach cues and other listening skills

H30 establish daily routine

H31 explain change in routine

H32 work from factual to abstract questions (concrete to abstract)

H33 list steps necessary to complete assignment

H34 provide time-frame for long-term assignments

H35 provide direction when student has several options

H36 teach SQ3R process (survey, questions, read, recite, review)

H37 allow some written assignments to be done as a group project

H38 work from easy to hard problems

H39 allow explanation time - provide teacher instruction before giving assignment

H40 use short answers

H41 stress accuracy

H42 provide work time during class

H43 provide specific feedback on completed work

H44 provide immediate feedback when possible

H45 allow notes with oral report

H46 allow visual aids with oral report

H47 provide option to read slightly or orally

H48 teach techniques to aid in generalization

H49 organize lectures following an outline form

H50 teach outlining/provide a model

H51 teach the needed structure for reports (model)

H52 assist student with spelling requests

H53 provide feedback during lectures

H54 provide careful structuring to teach writing skills

M55 provide activity worksheets

M56 have student maintain notebook for misspelled words

M57 use tangible teaching aids

M58 use log or personal journal

M59 use peer student to take notes and share and/or compare with notes of LD student

M60 provide examples on worksheets

M61 provide word bank for new or unfamiliar vocabulary

M62 modify map/chart work

M63 provide a study guide

M64 use a story starter approach (ex. give first paragraph and have student complete story)

M65 utilize a consistent format for worksheets

M66 utilize a multisensory presentation (ex. written, oral, lab work)

M67 teach in small, sequential steps

M68 use clues/hints

M69 introduce new vocabulary

M70 brainstorm words (both when introducing or practicing vocabulary)

M71 give additional time for student to organize

M72 provide cues to comprehension of inferential thinking

M73 allow more time to complete (pacing)

M74 adjust time limit on oral reports

M75 reduce copying activities

M76 proofread the student's draft

L77 select material relevant to student

L78 provide taped material to listen to, rather than read

L79 allow correction of notes by using a model

L80 provide highlighted texts for student use

L81 divide multi-syllable words

L82 visually illustrate new vocabulary

L83 coordinate spelling needs with reading vocabulary

L84 give student a copy of teacher's notes

L85 give student a written outline of lecture

L86 use problem solving sequence chart

L87 use worksheet guide with film

L88 use audiovisual to introduce and/or summarize

L89 allow use of marker when reading

L90 provide a list of all assignments given - syllabus

L91 supply page number that answer is on

L92 teach divided page note-taking

L93 allow student to preview lecture notes

L94 use instructional games

L95 accept multi-model response (ex. if can't write, do orally)

L96 allow students to tape answers rather than write out

L97 allow student to tape oral reports rather than present to group

L98 substitute comparable projects in exchange for written assignments

L99 match pupil's reading ability to text used/or use companion text

L100 provide large print materials

L101 use "Hands On" activities

L102 use reading pairs (2 students read assignment together)

L103 have discussions with the individual to ensure comprehension

L104 discuss the individual's written response

L105 use small groups to discuss main ideas

L106 have student repeat directions

L107 adjust expectations - minimizing amount students must do to pass course

L108 use team teaching (when feasible)

L109 modify original task to meet needs of handicapped students

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III. ACCOMMODATIONS IN EVALUATION

H1 vary test format (written, oral, short answer, essay, multiple choice, true-false, matching, computation, yes-no, demonstration testing)

H2 increase allowable time for completion

H3 provide feedback to parents re: progress via phone, letter, or parent conference

H4 provide feedback to learners re; progress via teacher/student conference or written report

H5 underline important words in directions or test items

H6 read the directions to the student

H7 vary grading system - homework, tests, class discussion, special projects

H8 provide clear test copy

H9 provide review time in or outside of the class (emphasizing key points to study)

H10 provide advance notice for test preparation (preferably at the start of the unit)

H11 allow to recheck work on calculator

H12 have grading system reflect varied activities (homework, tests, projects)

M13 emphasize higher utilization of objective test in contrast to subjective tests

M14 block matching questions into smaller groups (ex. 5/5/5 rather than group of 15)

M15 provide examples of test content and format

L16 teacher records test on cassette tape

L17 allow student to tape answer on recorder (essay)

L18 take test orally (with teacher after school or with

special teacher in resource room)

L19 assist by reading the test questions to the student

L20 take exam in classroom during regular time; take exam again orally in resource room; average two scores

L21 change fill-in-the-blank to multiple choice format

L22 eliminate one of the choices in multiple choice (choose three answers instead of four)

L23 reduce weight of test importance

L24 review orally and individually to ensure comprehension of essay questions

L25 allow self checking

L26 chart grade progress for student use

Results:
Teachers of Mathematics

Reasonableness of Recommendations for
Mainstreamed Secondary Learning Disabled

Results of Survey Findings
Completed by Teachers of Math

In reviewing the findings the following marking system has been applied:

H = High Reasonableness = accommodations that require little extra time, little change in usual teaching practices, and little additional help.

> Items marked H (High Reasonableness) indicates over 50% (up to 100%) of the teachers agreed that the accommodation fit the above stated criteria.

M = Moderate Reasonableness = accommodations that require some extra time, some change in usual teaching practices, and some additional help.

> Items marked with an M (Moderate Reasonableness) indicates that nearly 50% of the teachers agreed that the accommodations fit the above stated criteria.

L = Low Reasonableness = accommodations that require much extra time, much change in usual teaching practices, and much additional help.

> Items marked with an L (Low Reasonableness) indicates that 25% or less of the teachers agreed the accommodation could be considered moderate or high reasonableness.

I. ACCOMMODATIONS IN CLASSROOM ENVIRONMENT

H1 reduce visual distractions (unusual/unnecessary clutter, gawdiness

H2 post assignments in same place

M3 provide for preferential seating

M4 assign learning partners (2 people)

M5 reduce auditory distractions (unusual/unnecessary noise factor)

M6 use volunteers (providing school has volunteers) available)

L7 use listening center

L8 use peer tutors

L9 assign to cooperative learning groups (3 to 6 in group)

II. ACCOMMODATIONS IN INSTRUCTION, MATERIALS AND AIDES

H1 provide clear copy (worksheets/handouts, etc.)

H2 explain the textbook format at beginning of course

H3 write key points on board or overhead

H4 provide vertically lined paper (graph paper) for correctly lining up math problems

H5 allow using a calculator and other appropriate aids

H6 provide a list of all assignments given - syllabus

H7 provide uncluttered worksheet format

H8 encourage use of a notebook with dividers for subject organization (student purchases)

H9 provide a list of materials needed

H10 teach abbreviations germane to the specific course

H11 clarify the criteria and format when giving written assignments

H12 ask students to skip lines in draft when doing written assignment

H13 utilize a consistent format for worksheets

H14 teach in small, sequential steps

H15 have frequent review

H16 have structure (concrete, developmental procedures)

H17 use clues/hints

H18 summarize key points

H19 use concise directions (both written and oral)

H20 introduce new vocabulary

H21 state purpose for reading when giving reading assignment

H22 verbalize steps necessary to complete assignment

H23 teach cues and other listening skills

H24 brainstorm words (both when introducing or practicing vocabulary)

H25 orally emphasize key words

H26 distinguish operations in math

H27 summarize and allow for questions

H28 give oral and written directions together

H29 circulate and assist (teacher)

H30 talk slower

H31 emphasize where directions are located

H32 vary voice, tone, and pitch

H33 establish daily routine

H34 explain change in routine

H35 work from factual to abstract questions (concrete to abstract)

H36 list steps necessary to complete assignment

H37 provide time-frame for long term assignments

H38 work from easy to hard problems

H39 allow explanation time - provide teacher instruction before giving assignment

H40 stress accuracy

H41 provide work time during class

H42 provide specific feedback on completed work

H43 provide immediate feedback when possible

H44 allow notes with oral report

H45 allow visual aids with oral report

H46 provide option to read silently or orally

H47 adjust time limit on oral reports

H48 organize lectures following an outline form

H49 reduce copying activities

H50 assist student with spelling requests

H51 provide feedback during lectures

M52 use diagrams and other visual aides

M53 allow correction of notes by using a model

M54 use tangible teaching aids

M55 use peer student to take notes and share and/or compare with notes of LD student

M56 compliment lecture of materials with added explanations

M57 modify map/chart work

M58 use samples of finished product as model

M59 supply page number that answer is on

M60 utilize a multisensory presentation (ex. written, oral, lab work)

M61 teach use of context clues

M62 give additional time for student to organize

M63 provide direction when student has several options

M64 provide cues to comprehension of inferential thinking

M65 allow more time to complete (pacing)

M66 use short answers

M67 teach techniques to aid in generalization

M68 teach outlining/provide a model

M69 provide careful structuring to teach writing skills

L70 select material relevant to student

L71 provide taped material to listen to, rather than read

L72 provide activity worksheets

L73 provide highlighted texts for student use

L74 divide multi-syllable words

L75 visually illustrate new vocabulary

L76 have student maintain notebook for misspelled words

L77 use or log personal journal

L78 coordinate spelling needs with reading vocabulary

L79 give student a copy of teacher's notes

L80 give student a written outline of lecture

L81 provide examples on worksheets

L82 use problem solving sequence chart

L83 use worksheet guide with film

L84 use audiovisual to introduce and/or summarize

L85 provide word bank for new or unfamiliar vocabulary

L86 allow use of marker when reading

L87 provide a study guide

L88 use a story starter approach (ex. give first paragraph and have student complete story)

L89 teach divided page note-taking

L90 allow student to preview lecture notes

L91 use instructional games

L92 accept multi-model response (ex. if can't write, do orally)

L93 allow students to tape answers rather than write out

L94 allow student to tape oral reports rather than present to group

L95 substitute comparable projects in exchange for written assignments

L96 match pupil's reading ability to text used/or use companion text

L97 provide large print materials

L98 use "Hands On" activities

L99 use reading pairs (2 students read assignment together)

L100 have discussions with the individual to ensure comprehension

L101 use small group to discuss main ideas

L102 discuss the individual's written response

L103 have student repeat directions

L104 adjust expectations - minimizing amount students must do to pass course

L105 teach SQ3R process (survey, questions, read, recite, review)

L106 allow some written assignments to be done as a group project

L107 use team teaching (when feasible)

L108 teach the needed structure for reports (model)

L109 modify original task to meet needs of handicapped students

L110 proofread the student's draft

III. ACCOMMODATIONS IN EVALUATION

H1 read the directions to the student

H2 provide clear test copy

H3 provide review time in or outside of the class (emphasizing key points to study)

H4 provide advance notice for test preparations (preferably at the start of the unit)

H5 provide examples of test content and format

H6 allow self checking

H7 allow to recheck work on calculator

H8 have grading system reflect varied activities (homework, tests, projects, presentation)

M9 emphasize higher utilization of objective test in contrast to subjective tests

M10 provide feedback to parents re: progress via phone, letter, or parent conference

M11 provide feedback to learners re: progress via phone, teacher/student conference, or written report

M12 underline important words in directions or test items

M13 block matching questions into smaller groups (ex. 5/5/5 rather than group of 15)

M14 chart grade progress for student use

L15 vary test format (written, oral, short answer, essay, multiple choice, true-false, matching, computation, yes-no, demonstration testing)

L16 increase allowable time for completion

L17 teacher records test on cassette tape

L18 allow student to tape answers on recorder (essay)

L19 take test orally (with teacher after school or with special teacher in resource room)

L20 assist by reading the test questions to the student

L21 change fill-in-the-blank to multiple-choice format

L22 take exam in classroom during regular time; take exam again orally in resource room; average two scores

L23 eliminate one of the choices in multiple choice (choose three answers instead of four)

L24 reduce weight of test importance

L25 review orally and individually to ensure comprehension of essay questions

L26 vary grading system - homework, tests, class discussion, special projects

Results:
Teachers of Science & Social Studies

Reasonableness of Recommendations for
Mainstreamed Secondary Learning Disabled

Results of Survey Findings
Completed by Teachers of Science/Social Studies

In reviewing the findings the following marking system has been applied:

H = High Reasonableness = accommodations that require little extra time, little change in usual teaching practices, and little additional help.

> Items marked H (High Reasonableness) indicates over 50% (up to 100%) of the teachers agreed that the accommodation fit the above stated criteria.

M = Moderate Reasonableness = accommodations that require some extra time, some change in usual teaching practices, and some additional help.

> Items marked with an M (Moderate Reasonableness) indicates that nearly 50% of the teachers agreed that the accommodations fit the above stated criteria.

L = Low Reasonableness = accommodations that require much extra time, much change in usual teaching practices, and much additional help.

> Items marked with an L (Low Reasonableness) indicates that 25% or less of the teachers agreed the accommodation could be considered moderate or high reasonableness.

I. ACCOMMODATIONS IN CLASSROOM ENVIRONMENT

H1 provide for preferential seating

H2 post assignments in same place

M3 reduce visual distractions (unusual/unnecessary clutter, gawdiness)

M4 assign learning partners (2 people)

M5 reduce auditory distractions (unusual/unnecessary noise facctors)

L6 use listening center

L7 use peer tutors

L8 use volunteers (providing school has volunteers available)

L9 assign to cooperate learning groups (3 to 6 in group)

II. ACCOMMODATIONS IN INSTRUCTION, MATERIALS, AND AIDES

H1 use diagrams and other visual aides

H2 provide clear copy (worksheets/handouts, etc.)

H3 provide activity worksheets

H4 explain the textbook format at beginning of course

H5 write key points on board or overhead

H6 use peer student to take notes and share and/or compare with notes of LD student

H7 compliment lecture of materials with added explanations

H8 use audiovisual to introduce and/or summarize

H9 provide vertically lined paper (graph paper) for correctly lining up math problems

H10 allow using a calculator and other appropriate aids

H11 use samples of finished product as model

H12 provide uncluttered worksheet format

H13 encourage use of a notebook with dividers for subject organization (student purchases)

H14 provide a list of materials needed

H15 teach abbreviations germane to the specific course

H16 clarify the criteria and format when giving written assignments

H17 utilize a consistent format for worksheets

H18 utilize a multisensory presentation (ex. written, oral, lab work)

H19 use "Hands On" activities

H20 have frequent review

H21 have structure (concrete, developmental procedures)

H22 use clues/hints

H23 summarize key points

H24 use concise directions (both written and oral)

H25 introduce new vocabulary

H26 state purpose for reading when giving reading assignment

H27 verbalize steps necessary to complete assignment

H28 orally emphasize key words

H29 distinguish operations in math

H30 summarize and allow for questions

H31 give oral and written directions together

H32 emphasize where directions are located

H33 talk slower

H34 vary voice, tone, and pitch

H35 circulate and assist (teacher)

H36 establish daily routine

H37 explain change in routine

H38 work from factural to abstract questions (concrete to abstract)

H39 list steps necessary to complete assignment

H40 provide time-frame for long term assignments

H41 provide direction when student has several options

H42 work from easy to hard problems

H43 allow explanation time - provide teacher instruction before giving assignment

H44 use short answers

H45 stress accuracy

H46 provide work time during class

H47 provide specific feedback on completed work

H48 provide immediate feedback when possible

H49 allow notes with oral report

H50 allow visual aids with oral report

H51 teach techniques to aid in generalization

H52 organize lectures following an outline form

H53 teach the needed structure for reports (model)

H54 assist student with spelling requests

H55 provide feedback during lectures

M56 allow correction of notes by using a model

M57 have student maintain notebook for misspelled words

M58 use tangible teaching aids

M59 provide examples on worksheets

M60 provide word bank for new or unfamiliar vocabulary

M61 modify map/chart work

M62 provide a list of all assignments given - syllabus

M63 provide a study guide

M64 teach divided page note-taking

M65 use instructional games

M66 ask students to skip lines in draft when doing written assignment

M67 teach in small, sequential steps

M68 discuss the individual's written response

M69 use small groups to discuss main ideas

M70 teach use of context clues

M71 brainstorm words (both when introducing or practicing vocabulary)

M72 teach cues and other listening skills

M73 adjust expectations - minimizing amount students must do to pass course

M74 give additional time for student to organize

M75 provide cues to comprehension of inferential thinking

M76 teach SQ3R process (survey, questions, read, recite, review)

M77 allow more time to complete (pacing)

M78 provide option to read silently or orally

M79 adjust time limit on oral reports

M80 reduce copying activities

M81 teach outlining/provide a model

M82 modify original task to meet needs of handicapped students

M83 proofread the student's draft

M84 provide careful structuring to teach writing skills

L85 select material relevant to student

L86 provide taped material to listen to, rather than

read

L87 provide highlighted texts for student use

L88 divide multi-syllable words

L89 visually illustrate new vocabulary

L90 substitute comparable projects in exchange for written assignments

L91 match pupil's reading ability to text used/or use companion text

L92 provide large print materials

L93 use reading pairs (2 students read assignment together)

L94 have discussions with the individual to ensure comprehension

L95 have student repeat directions

L96 allow some written assignments to be done as a group project

L97 use team teaching (when feasible)

L98 use log or personal journal

L99 coordinate spelling needs with reading vocabulary

L100 give student a copy of teacher's notes

L101 give student a written outline of lecture

L102 use problem solving sequence chart

L103 use worksheet guide with film

L104 allow use of marker when reading

L105 supply page number that answser is on

L106 use a story starter approach (ex. give first paragraph and have student complete story)

L107 allow student to preview lecture notes

L108 accept multi-model response (ex. if can't write, do orally)

L109 allow students to tape answers rather than write out

L110 allow student to tape oral reports rather than

present to group

III. ACCOMMODATIONS IN EVALUATION

H1 vary test format (written, oral, short answer, essay, multiple choice, true-false, matching, computation, yes-no, demonstration testing)

H2 emphasize higher utilization of objective test in contrast to subjective tests

H3 provide feedback to parents re: progress via phone, letter or parent conference

H4 provide feedback to learners re: progress via teacher/student conference or written report

H5 underline important words in directions or test items

H6 read the directions to the student

H7 provide clear test copy

H8 provide review time in or outside of the class (emphasizing key points to study)

H9 provide advance notice for test preparation (preferably at the start of the unit)

H10 allow to recheck work on calculator

H11 chart grade progress for student use

H12 have grading system reflect varied activities (homework, tests, projects, presenation)

M13 increase allowable time for completion

M14 block matching questions into smaller groups (ex. 5/5/5 rather than group of 15)

M15 provide examples of test content and format

L16 teacher records test on cassette tape

L17 allow student to tape answers on recorder (essay)

L18 take test orally (with teacher after school or

with special teacher in resource room)

L19 assist by reading the test questions to the student

L20 take exam in classroom during regular time; take exam again orally in resource room; average two scores

L21 change fill-in-the-blank to multiple choice format

L22 eliminate one of the choices in multiple choice (choose three answers instead of four)

L23 reduce weight of test importance

L24 review orally and individually to ensure comprehension of essay questions

L25 vary grading system - homework, tests, class discussion, special projects

L26 allow self checking

Results:
Teachers of Career/Vocational Education & Others

Reasonableness of Recommendations for
Mainstreamed Secondary Learning Disabled

Results of Survey Findings
Completed by Teachers of Vocational/Career Ed & Others

In reviewing the findings the following marking system has been applied:

H = High Reasonableness = accommodations that require little extra time, little change in usual teaching practices, and little additional help.

> Items marked H (High Reasonableness) indicates over 50% (up to 100%) of the teachers agreed that the accommodation fit the above stated criteria.

M = Moderate Reasonableness = accommodations that require some extra time, some change in usual teaching practices, and some additional help.

> Items marked with an M (Moderate Reasonableness) indicates that nearly 50% of the teachers agreed that the accommodations fit the above stated criteria.

L = Low Reasonableness = accommodations that require much extra time, much change in usual teaching practices, and much additional help.

> Items marked with an L (Low Reasonableness) indicates that 25% or less of the teachers agreed the accommodation could be considered moderate or high reasonableness.

I. ACCOMMODATIONS IN CLASSROOM ENVIRONMENT

H1 provide for preferential seating

H2 post assignments in same place

H3 reduce auditory distractions (unusual/unnecessary noise factors)

M4 reduce visual distractions (unusual/unnecessary clutter, gawdiness)

L5 assign learning partners (2 people)

L6 use listening center

L7 use peer tutors

L8 use volunteers (providing school has volunteers available)

L9 assign to cooperative learning groups (3 to 6 in group)

II. ACCOMMODATIONS IN INSTRUCTION, MATERIALS AND AIDES

H1 introduce new vocabulary

H2 state purpose for reading when giving reading assignment

H3 verbalize steps necessary to complete assignment

H4 orally emphasize key words

H5 distinguish operations in math

H6 summarize and allow for questions

H7 give oral and written directions together

H8 talk slower

H9 vary voice, tone, and pitch

H10 circulate and assist (teacher)

H11 establish daily routine

H12 explain change in routine

H13 list steps necessary to complete assignment

H14 provide time-frame for long term assignments

H15 work from easy to hard problems

H16 allow explanation time - provide teacher instruction before giving assignment

H17 use short answers

H18 stress accuracy

H19 provide clear copy (worksheets/handouts, etc.)

H20 explain the textbook format at beginning of course

H21 write key points on board or overhead

H22 use audiovisual to introduce and/or summarize

H23 provide vertically lined paper (graph paper) for correctly lining up math problems

H24 allow using a calculator and other appropriate aids

H25 use samples of finished product as model

H26 encourage use of a notebook with dividers for subject organization (student purchases)

H27 provide a list of materials needed

H28 ask students to skip lines in draft when doing written assignment

H29 utilize a multisensory presentation (ex. written, oral, lab work)

H30 use "Hands On" activities

H31 teach in small, sequential steps

H32 have frequent review

H33 have structure (concrete, developmental procedures)

H34 use clues/hints

H35 summarize key points

H36 use concise directions (both written and oral)

H37 provide work time during class

H38 provide immediate feedback when possible

H39 allow notes with oral report

H40 allow visual aids with oral report

H41 provide feedback during lectures

M42 select material relevant to student

M43 use diagrams and other visual aids

M44 provide activity worksheets

M45 coordinate spelling needs with reading vocabulary

M46 use tangible teaching aids

M47 compliment lecture of materials with added explanation

M48 provide examples on worksheets

M49 use problem solving sequence chart

M50 use worksheet guide with film

M51 modify map/chart work

M52 provide a list of all assignments given - sullabus

M53 provide uncluttered worksheet format

M54 teach abbreviations germane to the specific course

M55 provide a study guide

M56 clarify the criteria and format when giving written assignments

M57 teach divided page note-taking

M58 use instructional games

M59 accept multi-model responnse (ex. if can't write, do orally)

M60 provide specific feedback on completed work

M61 provide option to read silently or orally

M62 adjust time limit on oral reports

M63 teach techniques to aid in generalization

M64 organize lectures following an outline form

M65 reduce copying activities

M66 teach the needed structure for reports (model)

M67 proofread the student's draft

M68 assist student with spelling requests

M69 provide careful structuring to teach writing skills

L70 provide taped material to listen to, rather than read

L71 allow correction of notes by using a model

L72 provide highlighted texts for student use

L73 divide multi-syllable words

L74 visually illustrate new vocabulary

L75 have student maintain notebook for misspelled words

L76 use log or personal journal

L77 use peer student to take notes and share and/or compare with notes of LD student

L78 give student a copy of teacher's notes

L79 give student a written outline of lecture

L80 provide word bank for new or unfamiliar vocabulary

L81 allow use of marker when reading

L82 supply page number that answer is on

L83 use a story starter approach (ex. give first paragraph and have student complete story)

L84 allow student to preview lecture notes

L85 allow students to tape answers rather than write out

L86 allow student to tape oral reports rather than present to group

L87 substitute comparable projects in exchange for written assignments

L88 match pupil's reading ability to text used/or use companion test

L89 provide large print materials

L90 use reading pairs (2 students read assignment together)

L91 adjust expectations - minimizing amount students must do to pass course

L92 use team teaching (when feasible)

L93 teach outlining/provide a model

L94 modify original task to meet needs of handicapped students

L95 utilize a consistent format for worksheets

L96 have discussions with the individual to ensure comprehension

L97 discuss the individual's written response

L98 use small groups to discuss main ideas

L99 teach use of context clues

L100 brainstorm words (both when introducing or practicing vocabulary)

L101 have student repeat directions

L102 emphasize where directions are located

L103 teach cues and other listening skills

L104 work from factual to abstract questions (concrete to abstract)

L105 give additional time for student to organize

L106 provide direction when student has several options

L107 provide cues to comprehension of inferential thinking

L108 teach SQ3R process (survey, questions, read, recite, review

L109 allow some written assignments to be done as a group

L110 allow more time to complete (pacing)

III. ACCOMMODATIONS IN EVALUATION

H1 vary test format (written, oral, short answer, essay, multiple choice, true-false, matching, computation, yes-no, demonstration testing)

H2 vary grading system - homework, tests, class discussion, special projects

H3 provide clear test copy

H4 provide review time in or outside of the class (emphasizing key points to study)

H5 provide advance notice for test preparation (preferably at the start of the unit)

H6 allow to recheck work on calculator

H7 have grading system reflect varied activities (homework, tests, projects, presentation)

M8 eliminate one of the choices in multiple choice (choose three answers instead of four)

M9 reduce weight of test importance

M10 review orally and individually to ensure comprehension of essay questions

M11 provide examples of test content and format

M12 allow self checking

M13 chart grade progress for student use

M14 emphasize higher utilization of objective test in contrast to subjective tests

M15 increase allowable time for completion

M16 provide feedback to parents re: progress via phone, letter, or parent conference

M17 provide feedback to learners re: progress via teacher/student conference or written report

M18 underline important words in directions or test items

M19 read the directions to the student

L20 teacher records test on cassette tape

L21 allow student to tape answers on recorder (essay)

L22 take test orally (with teacher after school or with special teacher in resource room)

L23 assist by reading the test questions to the student

L24 take exam in classroom during regular time; take exam again orally in resource room; average to scores

L25 change fill-in-the-blank to multiple-choice format

L26 block matching questions into smaller groups (ex. 5/5/5 rather than group of 15)

Reasonable Accommodations

One of the goals of the project was to develop a list of accommodations that regular education teachers viewed as highly and moderately reasonable. The following list of accommodations are those items which fit the criteria of being highly and moderately reasonable (criteria: nearly 50% to 100% perceived as requiring some to little change in their usual teaching practice).

The data has been separated into five areas:

1. General (all teachers responses)

2. English

3. Math

4. Science/Social Studies

5. Vocational/Career Education & Others

Since these items are viewed as moderately and highly reasonable by regular eduators, it is assumed these modifications or accommodations should be expected to be implemented by regular educators when they are teaching the learning disabled. One would hope that additional interventions or adjustments would be made. The listed items should be the minimal expectations.

Reasonable Accommodations

I. ACCOMMODATIONS IN CLASSROOM ENVIRONMENT

1.	post assignments in same place
2.	provide for preferential seating
3.	reduce visual distractions (unusual/ unnecessary clutter, gawdiness)

II. ACCOMMODATIONS IN INSTRUCTION, MATERIALS AND AIDES

1.	provide clear copy (worksheets/ handouts, etc.)
2.	explain the textbook format at beginning of course
3.	write key points on board or overhead
4.	provide vertically lined paper (graph paper) for correctly lining up math problems
5.	allow using a calculator and other appropriate aids
6.	encourage use of a notebook with dividers for subject organization (student purchases)
7.	provide a list of materials needed
8.	have frequent review
9.	have structure (concrete, developmental procedures)
10.	summarize key points
11.	use concise directions (both written and oral)
12.	state purpose for reading when giving reading assignment
13.	verbalize steps necessary to complete

	assignment
14.	orally emphasize key words
15.	distinguish operations in math
16.	summarize and allow for questions
17.	give oral and written directions together
18.	allow to recheck work on calculator
19.	talk slower
20.	vary voice, tone, and pitch
21.	circulate and assist (teacher)
22.	establish daily routine
23.	explain change in routine
24.	list steps necessary to complete assignment
25.	provide time-frame for long term assignments
26.	stress accuracy
27.	provide work time during class
28.	provide immediate feedback when possible
29.	allow notes with oral report
30.	allow visual aids with oral report
31.	provide feedback during lectures
32.	work from easy to hard problems
33.	allow explanation time - provide teacher instruction before giving assignment
34.	use diagrams and other visual aides
35.	complement lecture of materials with added explanations
36.	use samples of finished produce as model
37.	teach abbreviations germane to the

specific course

38. utilize a consistent format for worksheets

39. utilize a multisensory presentation (ex. written, oral, lab work)

40. use "Hands On" activities

41. clarify the criteria and format when giving written assignments

42. ask students to skip lines in draft when doing written assignment

43. teach in small, sequential steps

44. use clues/hints

45. introduce new vocabulary

46. teach use of context clues

47. emphasize where directions are located

48. teach cues and other listening skills

49. work from factual to abstract questions (concrete to abstract)

50. provide direction when student has several options

51. use short answers

52. provide specific feedback on completed work

53. provide option to read silently or orally

54. adjust time limit on oral reports

55. teach techniques to aid in generalization

56. organize lectures following an outline form

57. reduce copying activities

58. teach outlining/provide a model

59. teach the needed structure for

reports (model)
60. assist student with spelling requests
61. provide careful structuring to teach writing skills

III. ACCOMMODATIONS IN EVALUATION

1. provide clear test copy
2. provide review time in or outside of the class (emphasizing key points to study)
3. provide advance notice for test preparations (preferably at the start of the unit)
4. chart grade progress for student use
5. have grading system reflect varied activities (homework, tests, projects, presentation)
6. provide feedback to parents re: progress via phone, letter or parent conference
7. provide feedback to learners re: progress via teacher/student conference or written report
8. vary test format (written, oral, short answer, essay, multiple choice, true-false, matching, computation, yes-no, demonstration testing)
9. underline important words in directions or test items
10. read the directions to the student

Reasonable Accommodations: Teachers of English

I. ACCOMMODATIONS IN CLASSROOM ENVIRONMENT

1.	provide for preferential seating
2.	reduce visual distractions (unusual/ unnecessary clutter, gawdiness)
3.	post assignments in same place
4.	reduce auditory distractions (unusual/ unnecessary noise factors)

II. ACCOMMODATIONS IN INSTRUCTION, MATERIALS AND AIDES

1.	use diagrams and other visual aides
2.	provide clear copy (worksheets/ handouts, etc.)
3.	explain the textbook format at beginning of course
4.	write key points on board or overhead
5.	compliment lecture of materials with added explanations
6.	provide vertically lined paper (graph paper) for correctly lining up math problems
7.	allow using a calculator and other appropriate aids
8.	use samples of finished product as model
9.	provide uncluttered worksheet format
10.	encourage use of a notebook with dividers for subject organization (student purchases)
11.	provide a list of materials needed

12.	teach abbreviations germane to the specific course
13.	clarify the criteria and format when giving written assignments
14.	ask students to skip lines in draft when doing written assignment
15.	have frequent review
16.	have structure (concrete, developmental procedures)
17.	summarize key points
18.	use concise directions (both written and oral)
19.	state purpose for reading when giving reading assignment
20.	teach use of context clues
21.	verbalize steps necessary to complete assignment
22.	orally emphasize key words
23.	summarize and allow for questions
24.	give oral and written directions together
25.	emphasize where directions are located
26.	talk slower
27.	vary voice, tone, and pitch
28.	circulate and assist (teacher)
29.	teach cues and other listening skills
30.	establish daily routine
31.	explain change in routine
32.	work from factural to abstract questions (concrete to abstract)
33.	list steps necessary to complete assignment
34.	provide time-frame for long term assignments

35.	provide direction when student has several options
36.	teach SQ3R process (survey questions, read, recite, review)
37.	allow some written assignments to be done as a group project
38.	work from easy to hard problems
39.	allow explanation time - provide teacher instruciton before giving assignment
40.	use short answers
41.	stress accuracy
42.	provide work time during class
43.	provide specific feedback on completed work
44.	provide immediate feedback when possible
45.	allow notes with oral report
46.	allow visual aids with oral report
47.	provide option to read silently or orally
48.	teach techniques to aide in generalization
49.	organize lectures following an outline form
50.	teach outlining/provide a model
51.	teach the needed structure for reports (model)
52.	assist student with spelling requests
53.	provide feedback during lectures
54.	provide careful structuring to teach writing skills
55.	provide activity worksheets
56.	have student maintain notebook for misspelled words

57.	use tangible teaching aids
58.	use log or personal journal
59.	use peer student to take notes and share and/or compare with notes of LD student
60.	provide examples on worksheets
61.	provide word bank for new or unfamiliar vocabulary
62.	modify map/chart work
63.	provide a study guide
64.	use a story starter approach (ex. give first paragraph and have student complete story)
65.	utilize a consistent format for worksheets
66.	utilize a multisensory presentation (ex. written, oral, lab work)
67.	teach in small, sequential steps
68.	use clues/hints
69.	introduce new vocabulary
70.	brainstorm words (both when introducing or practicing vocabulary)
71.	give additional time for student to organize
72.	provide cues to comprehension of inferential thinking
73.	allow more time to complete (pacing)
74.	reduce copying activities
75.	proofread the student's draft
76.	adjust time limit on oral reports

III. ACCOMMODATIONS IN EVALUATION

1.	vary test format (written, oral, short answer, essay, multiple choice, true-false, matching, computation, yes-no demonstration testing)
2.	increase allowable time for completion
3.	provide feedback to parents re: progress via phone, letter or parent conference
4.	provide feedback to learners re: progress via teacher/student conference or written report
5.	underline important words in directions or test items
6.	read the directions to the student
7.	vary grading system - homework, tests, class discussion, special projects
8.	provide clear test copy
9.	provide review time in or outside of the class (emphasizing key points to study)
10.	provide advance notice for test preparation (preferably at the start of the unit)
11.	allow to recheck work on calculator
12.	have grading system reflect varied activities (homework, tests, projects, presentation
13.	emphasize higher utilization of objective test in contrast to subjective tests
14.	block matching questions into smaller groups (ex. 5/5/5 rather than group of 15)
15.	provide examples of test content and format

Reasonable Accommodations: Teachers of Mathematics

I. ACCOMMODATIONS IN CLASSROOM ENVIRONMENT

1.	reduce visual distractions (unusual/ unnecessary clutter, gawdiness)
2.	post assignments in same place
3.	provide for preferential seating
4.	assign learning partners (2 people)
5.	reduce auditory distractions (unusual/ unnecessary noise factors)
6.	use volunteers (providing school has volunteers available)

II. ACCOMMODATIONS IN INSTRUCTION, MATERIALS AND AIDES

1.	provide clear copy (worksheets/ handouts, etc.)
2.	explain the textbook format at beginning of course
3.	write key points on board or overhead
4.	provide vertically lined paper (graph paper) for correctly lining up math problems
5.	allow using a calculator and other appropriate aids
6.	provide a list of all assignments given - syllabus
7.	provide uncluttered worksheet format
8.	encourage use of a notebook with dividers for subject organization (student purchases)
9.	provide a list of materials needed
10.	teach abbreviations germane to the

	specific course
11.	clarify the criteria and format when giving written assignments
12.	ask students to skip lines in draft when doing written assignment
13.	utilize a consistent format for worksheets
14.	teach in small, sequential steps
15.	have frequent review
16.	have structure (concrete, developmental procedures)
17.	use clues/hints
18.	summarize key points
19.	use concise directions (both written and oral)
20.	introduce new vocabulary
21.	state purpose for reading when giving reading assignment
22.	verbalize steps necessary to complete assignment
23.	brainstorm words (both when introducing or practicing vocabulary)
24.	orally emphasize key words
25.	distinguish operations in math
26.	summarize and allow for questions
27.	give oral and written directions together
28.	emphasize where directions are located
29.	talk slower
30.	vary voice, tone, and pitch
31.	establish daily routine
32.	explain change in routine

33.	work from factual to abstract questions (concrete to abstract)
34.	list steps necessary to complete assignment
35.	provide time-frame for long term assignments
36.	work from easy to hard problems
37.	allow explanation time - provide teacher instruction before giving assignment
38.	stress accuracy
39.	provide work time during class
40.	provide specific feedback on completed work
41.	provide immediate feedback when possible
42.	allow notes with oral report
43.	allow visual aids with oral report
44.	provide option to read silently or orally
45.	adjust time limit on oral reports
46.	organize lectures following an outline form
47.	reduce copying activities
48.	assist student with spelling requests
49.	provide feedback during lectures
50.	use diagrams and other visual aides
51.	allow correction of notes by using a model
52.	use tangible teaching aids
53.	use peer student to take notes and share and/or compare with notes of LD student
54.	compliment lecture of materials with added explanations

55.	modify map/chart work
56.	use samples of finished product as model
57.	utilize a multisensory presentation (ex. written, oral, lab work)
58.	teach use of context clues
59.	give additional time for student to organize
60.	provide direction when student has several options
61.	provide cues to comprehension of inferential thinking
62.	allow more time to complete (pacing)
63.	use short answers
64.	teach techniques to aid in generalization
65.	teach outlining/provide a model
66.	provide careful structuring to teach writing skills
67.	supply page number that answer is on

III. ACCOMMODATIONS IN EVALUATION

1.	read the directions to the student
2.	provide clear test copy
3.	provide review time in or outside of the class (emphasizing key points to study)
4.	provide advance notice for test preparation (preferably at the start of the unit)
5.	provide examples of test content and format

6.	allow self checking
7.	allow to recheck work on calculator
8.	have grading system reflect varied activities (homework, tests, projects, presentation
9.	emphasize higher utilization of objective test in contrast to subjective tests
10.	provide feedback to parents re: progress via phone, letter or parent conference
11.	provide feedback to learners re: progress via teacher/student conference or written report
12.	underline important words in directions or test items
13.	block matching questions into smaller groups (ex. 5/5/5 rather than group of 15)
14.	chart grade progress for student use

Reasonable Accommodations:
Teachers of Science & Social Studies

I. ACCOMODATIONS IN CLASSROOM ENVIRONMENT

1.	provide for preferential seating
2.	post assignments in same place
3.	reduce visual distractions (unusual/ unnecessary clutter, gawdiness)
4.	assign learning partners (2 people)
5.	reduce auditory distractions (unusual/ unnecessary noise factors)

II. ACCOMMODATIONS IN INSTRUCTION, MATERIALS AND AIDES

1.	use diagrams and other visual aides
2.	provide clear copy (worksheets, handouts, etc.)
3.	provide activity worksheets
4.	explain the textbook format at beginning of course
5.	write key points on board or overhead
6.	use peer student to take notes and share and/or compare with notes of LD student
7.	complement lecture of materials with added explanations
8.	use audiovisual to introduce and/or summarize
9.	provide vertically lined paper (graph paper) for correctly lining up math problems
10.	allow using a calculator and other appropriate aids
11.	use samples of finished product as

	model
12.	provide uncluttered worksheet format
13.	encourage use of a notebook with dividers for subject organization (student purchases)
14.	provide a list of materials needed
15.	teach abbreviations germane to the specific course
16.	clarify the criteria and format when giving written assignments
17.	utilize a consistent format for worksheets
18.	utilize a multisensory presentation (ex. written, oral, lab work)
19.	use "Hands On" activities
20.	have frequent review
21.	have structure (concrete, developmental procedures)
22.	use clues/hints
23.	summarize key points
24.	use concise directions (both written and oral)
25.	introduce new vocabulary
26.	state purpose for reading when giving reading assignment
27.	verbalize steps necessary to complete assignment
28.	orally empahsize key words
29.	distinguish operations in math
30.	summarize and allow for questions
31	give oral and written directions together
32.	emphasize where directions are located
33.	talk slower

34.	vary voice, tone, and pitch
35.	circulate and assist (teacher)
36.	establish daily routine
37.	explain change in routine
38.	work from factual to abstract questions (concrete to abstract)
39.	list steps necessary to complete assignment
40.	provide time-frame for long term assignments
41.	provide direction when student has several options
42.	work from easy to hard problems
43.	allow explanation time - provide teacher instruction before giving assignment
44.	use short answers
45.	stress accuracy
46.	provide work time during class
47.	provide specific feedback on completed work
48.	provide immediate feedback when possible
49.	allow notes with oral report
50.	allow visual aids with oral report
51.	teach techniques to aid in generalization
52.	organize lectures following an outline form
53.	teach the needed structure for reports (model)
54.	assist student with spelling requests
55.	provide feedback during lectures
56.	allow correction of notes by using a model

57.	have student maintain notebook for misspelled words
58.	use tangible teaching aids
59.	provide examples on worksheets
60.	provide word bank for new or unfamiliar vocabulary
61.	modify map/chart work
62.	provide a list of all assignments given - syllabus
63.	provide a study guide
64.	teach divided page note-taking
65.	use instructional games
66.	ask students to skip lines in draft when doing written assignment
67.	discuss the individual's written response
68.	use small groups to discuss main ideas
69.	teach use of context clues
70.	teach cues and other listening skills
71.	adjust expectations - minimizing amount students must do to pass course
72.	provide cues to comprehension of inferential thinking
73.	teach SQ3R process (survey, questions, read, recite, review)
74.	allow more time to complete (pacing)
75.	reduce copying activities
76.	provide option to read silently or orally
77.	adjust time limit on oral reports
78.	teach outlining/provide a model
79.	modify original task to meet needs of handicapped students

80.	proofread the student's draft
81.	provide careful structuring to teach writing skills
82.	brainstorm words (both when introducing or practicing vocabulary)

III. ACCOMMODATIONS IN EVALUATION

1.	vary test format (written, oral, short answer, essay, multiple choice, true-false, matching, computation, yes-no, demonstration testing)
2.	emphasize higher utilization of objective test in contrast to subjective tests
3.	provide feedback to parents re: progress via phone, letter or parent conference
4.	provide feedback to leaners re: progress via teacher/student conference or written report
5.	underline imporant words in directions or test items
6.	read the directions to the student
7.	provide clear test copy
8.	provide review time in or outside of the class (emphasizing key points to study)
9.	provide advance notice for test preparation (preferably at the start of the unit)
10.	allow to recheck work on calculator
11.	chart grade progress for student use
12.	have grading system reflect varied activities (homework, tests, projects, presentation

13.	provide examples of test content and format
14.	increase allowable time for completion
15.	block matching questions into smaller groups (ex. 5/5/5 rather than group of 15)

Reasonable Accommodations: Teachers of Career/Vocational Education & Others

I. ACCOMMODATIONS IN CLASSROOM ENVIRONMENT

1. provide for preferential seating
2. reduce auditory distractions (unusual/unnecessary noise factors)
3. post assignments in same place
4. reduce visual distractions (unusual/unnecessary clutter, gawdiness)

II. ACCOMODATIONS IN INSTRUCTION, MATERIALS, AND AIDES

1. utilize a multisensory presentation (ex. written, oral, lab work)
2. use "Hands On" activities
3. teach in small, sequential steps
4. have frequent review
5. have structure (concrete, developmental procedures)
6. use clues/hints
7. summarize key points
8. use concise directions (both written and oral)
9. introduce new vocabulary
10. state purpose for reading when giving reading assignment
11. provide a list of materials needed
12. provide clear copy (worksheets/handouts, etc.)
13. allow using a calculator and other appropriate aids
14. verbalize steps necessary to complete assignment

15. orally emphasize key words

16. distinguish operations in math

17. summarize and allow for questions

18. give oral and written directions together

19. ask students to skip lines in draft when doing written assignment

20. encourage use of a notebook with dividers for subject organization (student purchases)

21. use audiovisual to introduce and/or summarize

22. provide vertically lined paper (graph paper) for correctly lining up math problems

23. use samples of finished product as model

24. explain the textbook format at beginning of course

25. write key points on board or overhead

26. list steps necessary to complete assignment

27. provide time-frame for long term assignments

28. provide work time during class

29. provide feedback during lectures

30. provide immediate feedback when possible

31. allow notes with oral report

32. allow visual aids with oral report

33. talk slower

34. vary voice, tone, and pitch

35. circulate and assist (teacher)

36. establish daily routine

37. explain change in routine

38. work from easy to hard problems

39. allow explanation time - provide teacher instruction before giving assignment

40. use short answers

41. stress accuracy

42. select material relevant to student

43. use diagrams and other visual aides

44. coordinate spelling needs with reading vocabulary

45. use tangible teaching aids

46. provide activity worksheets

47. compliment lecture of materials with added explanations

48. provide examples on worksheets

49. use problem solving sequence chart

50. use worksheet guide with film

51. provide a list of all assignments given - syllabus

52. provide uncluttered worksheet format

53. modify map/chart work

54. teach abbreviations germane to the specific course

55. provide a study guide

56. clarify the criteria and format when giving written assignments

57. teach divided page note-taking

58. use instructional games

59. accept multi-model response (ex. if can't write, do orally)

60. proofread the student's draft

61. assist student with spelling requests

62. organize lectures following an outline form

63. reduce copying activities

64. provide option to read silently or orally

65. adjust time limit on oral reports

66. teach techniques to aide in generalization

67. provide specific feedback on completed work

68. provide careful structuring to teach writing skills

69. teach the needed structure for reports (model)

III. ACCOMMODATIONS IN EVALUATION

1. vary test format (written, oral, short answer, essay, multiple choice, true-false, matching, computation, yes-no, demonstration testing)

2. vary grading system - homework, tests, class discussion, special projects

3. provide clear test copy

4. provide review time in or outside of the class (emphasizing key points to study)

5. provide advance notice for preparation (preferably at the start of the unit)

6. allow to recheck work on calculator

7. have grading system reflect varied activities (homework, tests, projects, presentation)

8. eliminate one of the choices in multiple choice (choose three answers instead of four)

9. reduce weight of test importance

10. review orally and individually to

	ensure comprehension of essay questions
11.	provide examples of test content and format
12.	allow self checking
13.	chart grade progress for student use
14.	underline important words in directions or test items
15.	read the directions to the student
16.	emphasize higher utilization of objective test in contrast to subjective tests
17.	increase allowable time for completion
18.	provide feedback to parents re: progress via phone, letter, or parent conference
19.	provide feedback to learners re: progress via teacher/student conference or written report

Alternative Approaches to Staff Development

Projected Inservice

Several inservice ideas have been explored. Minimal field testing has been done to determine effectiveness, however, extensive testing is being planned for 1986-87. This will involve different LEA using the ideas with appropriate staff members. Part of the plan is to work with each LEA in order to determine feasibility of other LEA's doing similar inservice.

At the present time six specific plans have been formulated. These include:

1. General Inservice: Building/Department Level
2. Building/Department: Staff Development
3. Teacher Utilization: Pre-Referral/Referral
4. Teacher/Consultant: Instructional Improvement
5. Teacher Utilization: Self-Development
6. Administrative/Teacher Utilization: Observation/Evaluation

GENERAL INSERVICE: BUILDING/DEPARTMENT LEVEL

Statement: The process of developing a list of reasonable accommodations appeared to generate considerable discussion among teacher. Discussion ranged from total agreement on some items to total disagreement on others. Controversy appeared most often when a teacher did not believe the practice should be implemented rather than reasonableness of the item. The openness and frankness indicated real differences in how regular educators view modification.

If the process used to obtain a list of reasonable accommodation can create a way to communicate both agreement and disagreement, it may become a tool to inservice. The goal would be do develop a list of reasonable accommodations unique to a building or a department for implementation by all teachers.

Procedures:

1. Use the original document Survey: Reasonableness of Accommodations for Mainstreamed Secondary Learning Disabled. (See appendix - exhibit 1).

2. Use the definition and the process outlined and have the staff complete the entire survey.

3. Discussion should be held concerning all items marked by the majority as being moderate or high reasonableness.

   a. Does everyone understand what these items are?

   b. Is there any reason why they cannot be implemented in every class?

4. Items that were determined to be low reasonableness should be discussed thoroughly.

   a. Are there valuable interventions that could be implemented?

   b. What changes are required to have teachers implement?

   c. Can these preferred changes be done in the district or department (cost, time. etc.)?

5. Once discussion has been completed, those items that appear feasible to implement would be compiled. This document would then become a list personalized for a particular department or district. Teachers would be expected to implement in their classroom to serve mainstreamed students and other students needing such support.

6. Additional procedures that could be used includes data covered in the sections that follow.

BUILDING/DEPARTMENT INSERVICE: STAFF DEVELOPMENT

Statement: The accommodation items could be used as a way to determine how each teacher perceives his or her inservicing needs. This process should be used prior to deciding on inservice training and can be used to not only determine what each teacher perceives as a need but can also determine those teachers who could be used as resource people to other teachers. Using building personnel to inservice others has much merit and frequently is very effective.

Procedure:

1. Have each teacher use the resource document "Reasonableness of Accommodations for Mainstreamed Secondary Learning Disabled" (appendix - exhibit 1).

2. Each teacher selects items he or she views as being most effective to help mainstreamed students (either using or want to use. Please note: These items could come from the document as a whole or selection could be made based on each section in the document.

3. List these on form A. (see form A - page 99)

4. Compile those as seen as a need and develop inservice by grouping teachers who have similar perceived needs. (Please note: Utilizing the different sections appears most feasible since inservice in many districts come in one to two hour blocks of time).

5. Compile list of items teachers are doing frequently that are effective. Use these people as resource people to help other teachers.

6. Data can also be shared with AEA personnel to establish inservice needs.

Note: In limited field testing it has been found that the data collected to individualize inservice & packeted in short time blocks to meet individual teacher needs has been an effective way to create teachers awareness in accommodating the mainstreamed student.

Reasonable Accommodations Secondary Level
Form A

Building/Department: Staff Development

Teacher_____

Grade (Subject)_____

Date_____

Primary User: School Staff

Use Reasonable Accommodations Secondary Level Survey Form. From the survey select accommodations that could be used when teaching secondary learning disabled students in a regular education class. List the selected accommodation below for staff development or inservice needs and indicate how often the following accommodations have been used in your classroom or if additional information is needed.

Checklist of Reasonable Accommodations

F = Frequently; R = Rarely; AIN = Additional Information Needed

F	R	AIN	
---	---	---	1.
---	---	---	2.
---	---	---	3.
---	---	---	4.
---	---	---	5.
---	---	---	6.
---	---	---	7.
---	---	---	8.
---	---	---	9.
---	---	---	10.
---	---	---	11.
---	---	---	12.

From the above list, please select 5 areas of accommodation concern for which assistance is needed.

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7/86

TEACHER UTILIZATION: PRE-REFERRAL/REFERRAL

Statement: State regulations require that prior attempts be made to document different accommodations that have been tried within the regular classroom. The Reasonableness of Accommodations for Mainstreamed Secondary Learning Disabled survey can be a tool to document these accommodations attempts.

Procedures:

1. Use the original document Survey: Reasonableness of Accommodations for Mainstreamed Secondary Learning Disabled. (See appendix - exhibit 1). This document could be used prior to or after meeting with the principal or Teacher Assist Team to discuss the individual student's situation.

2. The teacher can select items from the Survey that describes accommodations which would be used with the individual student whose educational needs are being reviewed and accommodations/changes being considered.

3. These can be listed using form B (see form B - Page 101)

4. If assistance is needed to implement any of the selected accommodations, AEA personnel or other LEA staff members should be assigned to inservice the teacher so the intervention(s) can be tried.

5. The teacher would then rate the effectiveness of the accommodation attempted with that individual student and relate findings to appropriate personnel.

Reasonable Accommodations Secondary Level
Form B
Pre-Referral/Referral
Individual Student Needs

Student_____

Grade_____

Building_____

Primary User: Classroom Teacher

Select items from the Accommodations Survey that describe accommodations which could be used when teaching secondary learning disabled students in a regular education class. Please select accommodations from the Survey for student referral, progress report, or follow-up and rate the effectiveness of each method when working with above named student.

Checklist of Reasonable Accommodations

WE = Works Effectively; DNWE = Does Not Work Effectively

WE	DNWE	
____	____	1.
____	____	2.
____	____	3.
____	____	4.
____	____	5.
____	____	6.
____	____	7.
____	____	8.
____	____	9.
____	____	10.
____	____	11.
____	____	12.

From the above list, please select 5 areas of accommodation for which assistance is needed.

____ ____ ____ ____ ____

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TEACHER/CONSULTANT: INSTRUCTIONAL IMPROVEMENT

Statement: Accommodating learning disabled students in the regular education classroom may create a need for the consultant to work with the regular teacher. Frequently, at a pre-referral or referral level the regular education classroomm teacher sees the need to involve the Special Education Consultant or Teacher Assist Team in developing a list of potential modifications or to further document those accommodations that have been tried.

Procedure:

1. The requesting teacher lists five or more accommodations which he/she sees a need for assistance. (If Form B has been utilized, the five areas of accommodation concerns listed at the bottom of the form could be used).

2. The Teacher Assist Team or the Special Education Consultant would conduct a classroom observation. Any recommended strategies in the intervention or comments would be noted on the sections under Comments/Recommended Intervention for each accommodations obsedrved. (use form C - page 103)

3. Discussion of strategies could be held with the teacher(s) and the Special Education Consultant or the Teacher Assist Team. If there is a need for further development for better utilization of accommodations an inservice could be established on an individual basis.

Reasonable Accommodations Secondary Level
Form C
Teacher/Consultant: Instructional Improvement

Accommodations Observation/Assistance Form

Code:
O = Observable
NO = Not Observable
Class Activities did not permit
FR = Observation - Frequency

Teacher_____
Grade (Subject)_____
Student_____
Primary User - Consultant

Please list 5 or more accommodations which the teacher has indicated concern over or need for support assistance (recommend using the fine areas of accommodation concerns listed at the bottom of Form B). Circle appropriate box and list comments, recommended strategies and frequency rate where appropriate.

List Accommodations	Code		
1.	O	NO	Fr
Comments/Action:			
2.	O	NO	Fr
Comments/Action:			
3.	O	NO	Fr
Comments/Action:			
4.	O	NO	Fr
Comments/Action:			
5.	O	NO	Fr
Comments/Action:			

Concluding Statement:

Date:
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Observer:

Teacher Utilization: Self-Development

Statement: Research suports the concept that teacher change is most likely to occur if the individual teacher has a model for change and is self-motivated to incorporate change. Since the accommodations are basically good teaching practices and it would require little additional training to implement, it appears that some teachers may be willing to select accommodations and to implement because they are interested in becoming more effective teachers.

Procedures:

1. Use either accommodations from the Survey: Reasonableness of Accommodations for mainstreaming Secondary Learning Disabled (appendix - exhibit 1) or items from those found listed on pages (reasonable items determined by teachers sampled)

2. The teacher selects those accommodations he or she wishes to implement.

3. Use Form D to list & to record. (see form D page 105)

4. The teacher re-assessment the consistency of usage and the results.

5. If assistance is needed, contact AEA consultant for inservice.

Reasonable Accommodations Secondary Level
Form D
Teacher Self-Development

Teacher_____
Grade (Subject)_____
Date_____
Primary User: School Staff

1) Use accommodations list or survey items
2) Select up to 15 accommodations most important to self-development
3) Complete the checklist, sides A & B
4) Inservice on needs assessment developed from checklist A & B
5) Implement plan to be consistent and effective in accommodations selected from needs assessment.
6) Re-evaluate Teacher Self-Development for further needs.

FU = Frequently Used; RU = Rarely Used; E = Effective; NE = Not Effective; AUAN = Anticipate Using - Assistance Needed

FU	RU	E	NE		B AU-AN
----	----	----	----	1.	---
----	----	----	----	2.	---
----	----	----	----	3.	---
----	----	----	----	4.	---
----	----	----	----	5.	---
----	----	----	----	6.	---
----	----	----	----	7.	---
----	----	----	----	8.	---
----	----	----	----	9.	---
----	----	----	----	10.	---
----	----	----	----	11.	---
----	----	----	----	12.	---
----	----	----	----	13.	---
----	----	----	----	14.	---
----	----	----	----	15.	---

ADMINISTRATIVE/TEACHER UTILIZATION OBSERVATION/EVALUATION

Statement: If the building principal sees implementing accommodations as viable, this should be reflected in the evaluation process. If the teacher knows what is expected and is evaluated on that expectancy, the evaluation should be viewed as non-threatening.

Procedure:

1. Determine a process to decide selection of accommodations.

2. List these using Form E.

3. This list is shared by both the teacher and the administrator (Use the Source Document of accommodations).

4. List those accommodations that will be implemented.

5. Use Form E to follow up and to support evaluation proces.

Reasonable Accommodations Secondary Level
Form E
Administrative Observation/
Accommodation Assistance Form

Accommodations Observation/Assistance Form
Code: O = Observable; NO = Not Observable Class Activities; FR = Observation - Frequency

Teacher _____
Grade (Subject)_____
Primary User: Administrative Staff

Teacher identifies accomodations from survey list in section to be evaluated. Administrative staff observes classroom setting for specific accommodations identified by teacher. Follow-up conference between administrator and teacher to implement/develop more extensive use of the accommodations or alternative strategies. Administrative staff re-observe to assess progress or further needs.

List Selected Accommodations	Code		
1.	O	NO	Fr
Comments:			
2.	O	NO	Fr
Comments:			
3.	O	NO	Fr
Comments:			
4.	O	NO	Fr
Comments:			
5.	O	NO	Fr
Comments:			

Concluding Statement:

_____ _____
Signature Date Signature Date

APPENDIX A

SURVEY

REASONABLENESS OF ACCOMMODATIONS FOR MAINSTREAMED SECONDARY LEARNING DISABLED

Purpose of Survey: to determine how teachers view implementing different accommodations when teaching secondary learning disabled students in a regular education class.

Please complete the following:

Name of School _____ Subject(s) you teach _____

Location: (Town) _____ _____

_____

_____

DIRECTIONS

The reference point in taking this survey is "How reasonable is the expectation of implementing each of the listed accommodations when teaching L.D. students in a regular education?"

A. For this survey "levels of reasonableness" have been defined as:

- High Reasonableness = accommodations that require little extra time, little change in usual teaching practices, and little additional help. (Items perceived as meeting this criteria are rated in the "High Reasonableness" column.)

- Moderate Reasonableness = accommodations that require some extra time, some change in usual teaching practices, and some additional help. (Items perceived as meeting this criteria are rated in the "Moderate Reasonableness" column.)

- Low Reasonableness = accommodations that require much extra time, much change in teaching practices, much additional help. (Items perceived as meeting this criteria are rated in the "Low Reasonableness" column.)

(Fagan, Graves, Tessier - Switlich, 1984)

B. Please note: As a rule of thumb, rate each item based on your initial interpretation. Do not rate on the basis of personal approval of the accommodation. Rate each item on the basis of the definition stated above.

C. Turn the page and complete the survey. When completed, return it to:

_____

_____

*** THANK YOU FOR TAKING PART IN THIS SURVEY ***

I. ACCOMMODATIONS IN CLASSROOM ENVIRONMENT

	High Reasonableness 3	Moderate Reasonableness 2	Low Reasonableness 1
1. provide for preferential seating			
2. reduce visual distractions (unusual/unneccesary clutter, gawdiness)			
3. assign learning partners (2 people)			
4. reduce auditory distractions (unusual/unncessary noise factors)			
5. use listening center			
6. post assignments in same place			
7. use peer tutors			
8. use volunteers (providing school has volunteers available)			
9. assign to cooperative learning groups (3 to 6 in group)			

ACCOMMODATIONS
IN
INSTRUCTION, MATERIALS AND AIDES

	High Reasonableness 3	Moderate Reasonableness 2	Low Reasonableness 1
1. select material relevant to student			
2. use diagrams and other visual aides			
3. provide clear copy (worksheets/handouts, etc.)			
4. provide taped material to listen to, rather than read			
5. provide activity worksheets			
6. allow correction of notes by using a model			
7. provide highlighted texts for student use			
8. divide multi-syllable words			
9. visually illustrate new vocabulary			
10. have student maintain notebook for misspelled words			
11. use log or personal journal			
12. coordinate spelling needs with reading vocabulary			
13. use tangible teaching aids			

ACCOMMODATIONS IN INSTRUCTION,
MATERIALS AND AIDES
Page 2

	High Reasonableness 3	Moderate Reasonableness 2	Low Reasonableness 1
14. explain the textbook format at beginning of course			
15. write key points on board or overhead			
16. use peer student to take notes and share and/or compare with notes of LD student			
17. complement lecture of materials with added explanations			
18. give student a copy of teacher's notes			
19. give student a written outline of lecture			
20. provide examples on worksheets			
21. use problem solving sequence chart			
22. use worksheet guide with film			
23. use audiovisual to introduce and/or summarize			
24. provide word bank for new or unfamiliar vocabulary			
25. provide vertically lined paper (graph paper) for correctly lining up math problems			
26. allow use of marker when reading			

ACCOMMODATIONS IN INSTRUCTION,
MATERIALS AND AIDES
Page 3

	High Reasonableness 3	Moderate Reasonableness 2	Low Reasonableness 1
27. allow using a calculator and other appropriate aids			
28. modify map/chart work			
29. use samples of finished product as model			
30. provide a list of all assignments given - syllabus			
31. provide uncluttered worksheet format			
32. encourage use of a notebook with dividers for subject organization (student purchases)			
33. supply page number that answer is on			
34. provide a list of materials needed			
35. teach abbreviations germane to the specific course			
36. provide a study guide			
37. use a story starter approach (ex. give first paragraph and have student complete story)			
38. clarify the criteria and format when giving written assignments			
39. teach divided page note-taking			

	High Reasonableness 3	Moderate Reasonableness 2	Low Reasonableness 1
40. allow student to preview lecture notes			
41. use instructional games			
42. accept multi-model response (ex. if can't write, do orally)			
43. ask students to skip lines in draft when doing written assignment			
44. allow students to tape answers rather than write out			
45. allow student to tape oral reports rather than present to group			
46. substitute comparable projects in exchange for written assignments			
47. match pupil's reading ability to text used/or use companion text			
48. provide large print materials			
49. utilize a consistent format for worksheets			
50. utilize a multisensory presentation (ex. written, oral, lab work)			
51. use "Hands On" activities			

ACCOMMODATIONS IN INSTRUCTION,
MATERIALS AND AIDES
Page 5

	High Reasonableness 3	Moderate Reasonableness 2	Low Reasonableness 1
52. teach in small, sequential steps			
53. have frequent review			
54. have structure (concrete, developmental procedures)			
55. use clues/hints			
56. summarize key points			
57. use concise directions (both written and oral)			
58. introduce new vocabulary			
59. state purpose for reading when giving reading assignment			
60. use reading pairs (2 students read assignment together)			
61. have discussions with the individual to ensure comprehension			
62. discuss the individual's written response			
63. use small groups to discuss main ideas			
64. teach use of context clues			

	High Reasonableness 3	Moderate Reasonableness 2	Low Reasonableness 1
65. brainstorm words (both when introducing or practicing vocabulary)			
66. verbalize steps necessary to complete assignment			
67. orally emphasize key words			
68. distinguish operations in math			
69. summarize and allow for questions			
70. give oral and written directions together			
71. have student repeat directions			
72. emphasize where directions are located			
73. talk slower			
74. vary voice, tone, and pitch			
75. circulate and assist (teacher)			
76. teach cues and other listening skills			
77. adjust expectations - minimizing amount students must do to pass course			

	High Reasonableness 3	Moderate Reasonableness 2	Low Reasonableness 1
78. establish daily routine			
79. explain change in routine			
80. work from factual to abstract questions (concrete to abstract)			
81. list steps necessary to complete assignment			
82. provide time-frame for long term assignments			
83. give additional time for student to organize			
84. provide direction when student has several options			
85. provide cues to comprehension of inferential thinking			
86. teach SQ3R process (survey, questions, read, recite, review)			
87. allow some written assignments to be done as a group project			
88. work from easy to hard problems			
89. allow explanation time - provide teacher instruction before giving assignment			
90. allow more time to complete (pacing)			

ACCOMMODATIONS IN INSTRUCTION,
MATERIALS AND AIDES
Page 8

	High Reasonableness 3	Moderate Reasonableness 2	Low Reasonableness 1
91. use short answers			
92. stress accuracy			
93. provide work time during class			
94. provide specific feedback on completed work			
95. provide immediate feedback when possible			
96. allow notes with oral report			
97. allow visual aids with oral report			
98. provide option to read silently or orally			
99. adjust time limit on oral reports			
100. teach techniques to aid in generalization			
101. use team teaching (when feasible)			
102. organize lectures following an outline form			
103. reduce copying activities			

	High Reasonableness 3	Moderate Reasonableness 2	Low Reasonableness 1
104. teach outlining/provide a model			
105. teach the needed structure for reports (model)			
106. modify original task to meet needs of handicapped students			
107. proofread the student's draft			
108. assist student with spelling requests			
109. provide feedback during lectures			
110. provide careful structuring to teach writing skills			

ACCOMMODATIONS
IN
EVALUATION

	High Reasonableness 3	Moderate Reasonableness 2	Low Reasonableness 1
1. vary test format (written, oral, short answer, essay, multiple choice, true-false, matching, computation, yes-no, demonstration testing)			
2. emphasize higher utilization of objective test in contrast to subjective tests			
3. increase allowable time for completion			
4. provide feedback to parents re: progress via phone, letter or parent conference			
5. provide feedback to learners re: progress via teacher/student conference or written report			
6. teacher records test on cassette tape			
7. allow student to tape answers on recorder (essay)			
8. take test orally (with teacher after school or with special teacher in resource room)			
9. assist by reading the test questions to the student			
10. take exam in classroom during regular time; take exam again orally in resource room; average two scores			
11. change fill-in-the-blank to multiple-choice format			

	High Reasonableness 3	Moderate Reasonableness 2	Low Reasonableness 1
12. underline important words in directions or test items			
13. read the directions to the student			
14. block matching questions into smaller groups (ex. 5/5/5 rather than group of 15)			
15. eliminate one of the choices in multiple choice (choose three answers instead of four)			
16. reduce weight of test importance			
17. review orally and individually to ensure comprehension of essay questions			
18. vary grading system - homework, tests, class discussion, special projects			
19. provide clear test copy			
20. provide review time in or outside of the class (emphasizing key points to study)			
21. provide advance notice for test preparation (preferably at the start of the unit)			
22. provide examples of test content and format			

	High Reasonableness 3	Moderate Reasonableness 2	Low Reasonableness 1
23. allow self checking			
24. allow to recheck work on calculator			
25. chart grade progress for student use			
26. have grading system reflect varied activities (homework, tests, projects, presentation			

APPENDIX B

STUDENTS WITH LEARNING DISABILITIES:

Definition and Characteristics

The following information was developed as part of the Modifications project in an effort to insure that project participants would have a common understanding of learning disabilities and an awareness of the various characteristics that individuals with learning disabilities might exhibit. The purpose, of course, was to have a basis for considering the appropriateness of various modifications for learning disabled students.

DEFINITION

Iowa's Rules of Special Education define learning disabilities, in part, as follows:

> "Learning disability" is the inclusive term denoting the inability to learn efficiently, in keeping with one's potential, when presented with the instructional approaches of the general education curriculum. The inability to learn efficiently is manifested as a disability in an individual's reception, organization, or expression of information relevant to school function. This disability is demonstrated as a severe discrepancy between an individual's general intellectual functioning and achievement in one or more of the following areas: School readiness skills, basic reading skills, reading comprehension, mathematical calculation, mathematical reasoning, written expression and listening comprehension. A learning disability is not primarily the result of sensory or physical impairments, mental disabilities, behavioral disorders, cultural or language difference, environmental disadvantage, or a history of an inconsistent educational program. (Education [670] - 12.3, Iowa Administrative Code).

CHARACTERISTICS

Individuals with learning disabilities exhibit difficulties or deficits in a variety of areas. The areas most frequently discussed in the literature are behavior, academics, motor skills, receptive and expressive skills, and organizational and study skills.

The following pages present characteristics frequently associated with learning disabilities. Of course, it should be realized that any student may exhibit some of these characteristics at one time or another. The distinguishing factors for students with learning disabilities are that the characteristics persist over time, resist simple or short-term solutions or interventions.

The list is presented for awareness and discussion purposes only. The presence of one or more of the characteristics in and of themselves should not be construed to mean the presence of a learning disability.

1. Behavior

-can be impulsive

-can be easily confused

-exhibits a short attention span

-displays low frustration tolerance

-demonstrates excessive mood swings

-may exhibit hyperactivity - constantly engaged in motor activity

-may exhibit lethargic, withdrawn behaviors

-shows defects in organization

-can be distractible

-demonstrates erratic learning behavior

-displays lack of cooperation

-displays lack of motivation to succeed in school

-displays lack of perseverance

-demonstrates inconsistent assignment completion

2. Academic

R = Reading
W = Writing
Gen = General
M = Math

R Experience difficulty with reading fluently

R Difficulty in recognizing words that are common across content areas

R Unable to use context clues as aids in unlocking words

R Exhibits reversals and inversions (reading b for d; no for on, etc.)

R Unable to comprehend written or spoken material in content area

R Has trouble distinguishing main ideas from details

W Unable to produce written assignments of adequate quality for the student's given grade level in English

W Inability to construct a logical paragraph which includes a topic sentence supporting facts and a concluding sentence

W Unable to choose correct spelling of words in multiple choice format

W Has difficulty recording notes from an oral presentation

W Usually mispells words in context and/or isolation

W Has trouble writing a sentence with a complete thought

Gen Demonstrates an apparent average or better ability with difficulties concentrated in reading, writing, and/or math

Gen Has trouble learning new material

Gen Usually is reluctant to try anything new and is frightened by change

Gen Has trouble following directions

Gen Has trouble seeing similarities and differences

Gen Has difficulty beginning and/or completing assignments

Gen Has trouble sequencing material

Gen Has difficulty summarizing material

M Unable to use mathematics rules which are specific to application type problems

M Has difficulty mastering basic math operation concepts

M Has difficulty understanding story problem process

M Has trouble analyzing relationship within math data

3. Motor Skills (Fine/Gross)

-poor copying

-fatigue and restlessness during writing or drawing tasks

-experiences difficulty in making straight lines to connect points, matching answers, or labeling maps

-exhibits poor sense of direction

-cannot take notes with speed or neatness

-can display sloppy and disorganized handwritten work

-can exhibit poor coordination

4. Receptive Characteristics

-exhibits erratic spelling or incorrect letter sequence

-often loses place when reading or copying

-overlooks details on pictures or maps

-skips or reverses words when reading aloud

-unable to follow written directions from board or printed page

-experiences difficulty with worksheets containing a great deal of visual stimuli

-exhibits poor sight vocabulary

-unable to read or copy accurately from blackboard

-exhibits eye strain, e.g., squinting, blinking, and holding head close to page

-experiences difficulty remembering what is seen

-uses fingers to keep place while reading

-unable to comprehend spoken or written material

-has difficulty visualizing materials

-unable to accurately record notes from oral presentation

-exhibits poor receptive vocabulary

-asks questions about oral directions and facts previously given

-loses interest or concentration during teacher instruction or class discussion

-cannot follow a series of oral directions

-becomes irritated by extraneous noise

-can experience difficulty remembering information presented auditorily

5. Organizational/Study Skills

-loses track of time and tends to get disoriented when moving from place to place

-has difficulty beginning assigned activities

-has difficulty completing assigned activities

-is often off task

-always seems to be doing things at the last minute

-has problems making choices and identifying priorities

-has a "messy" desk, locker, or notebook

-freuqently forgets assignments, directions, and schedules

-has difficulty adjusting to changes in class routine

-has trouble distinguishing main ideas from details

-shows poor organization for work on paper

-has trouble developing an outline

-frequently misplaces books, pencils, homework, etc.

-demonstrates inconsistent abilities

-exhibits lack of awareness

-demonstrates poor proofreading skills

-does not transfer ideas or thoughts from one situation to another

-experiences difficulty in establishing a reasonable amount of study time before taking a test

-cannot structure materials into a logical sequence

-does not apply appropriate test-taking skills

-cannot summarize information

-unable to follow a sequence of directions

-cannot classify/organize materials

-cannot use reference materials or resources

-has difficulty in outlining/taking notes on material

-can become disoriented during unpredictable situations

-demonstrates inability to formulate questions relevant to

content area

-cannot apply skimming/scanning techniques

6. Expression

-shows reluctance ot volunteer ideas or respond verbally to questions

-exhibits difficulty explaining self clearly and coherently

-completed written work slowly

-able to give correct answers orally but difficulty in writing answers on paper

-does not participate in discussions, oral presentations, or reading aloud

-has difficulty organizing thoughts and transferring to paper

-demonstrates difficulty in writing a sentence with a complete thought

-unable to vocalize thoughts rapidly

-demonstrates extreme difficulty on short answer type tests

-seems to be uncomfortable when speaking in a group

-comments, when made, are often confusing, irrelevant or inaccurate

-has trouble recalling a word he/she wants to use